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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/654,202	09/01/2000	Thomas Anthony Cofino	YOR920000611US1	6319
75	90 04/09/2003			
Louis J Percello Intellectual Property Law Dept IBM Corporation			EXAMINER	
			RHODE JR, ROBERT E	
P O Box 218 Yorktown Heights, NY 10598			ART UNIT PAPER NUM	PAPER NUMBER
			3625	
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Please find below and/or attached an Office communication concerning this application or proceeding.

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4		Application No.	Applicant(s)			
Office Action Summary		09/654,202	COFINO ET AL.			
		Examiner	Art Unit			
		Rob Rhode	3625			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
THE I - Exter after - If the - If NO - Failu - Any r	ORTENED STATUTORY PERIOD FOR REPI MAILING DATE OF THIS COMMUNICATION nsions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication, period for reply specified above is less than thirty (30) days, a re- period for reply is specified above, the maximum statutory perior re to reply within the set or extended period for reply will, by statu- eply received by the Office later than three months after the mailing ad patent term adjustment. See 37 CFR 1.704(b).	.136(a). In no event, however, may a reply be till ply within the statutory minimum of thirty (30) da d will apply and will expire SIX (6) MONTHS fron te, cause the application to become ABANDONE	mely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133).			
1) 🗌	Responsive to communication(s) filed on	·				
2a) <u></u> □	This action is FINAL . 2b)⊠ T	his action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
-	ion of Claims					
•—	Claim(s) 1-20 is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
<i>'</i>	Claim(s) is/are allowed.					
·	Claim(s) <u>1-20</u> is/are rejected.					
•	☑ Claim(s) <u>13-19</u> is/are objected to.					
	Claim(s) are subject to restriction and ion Papers	or election requirement.				
	The specification is objected to by the Examir	ner				
10)⊠ The drawing(s) filed on <u>01 September 2000</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12)☐ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachmen	-	, ,				
1) Notice	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informa	rry (PTO-413) Paper No(s) I Patent Application (PTO-152)			

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DETAILED ACTION

Drawings

The drawings filed on 09/01/2000 are acceptable subject to correction of the informalities indicated on the attached "Notice of Draftperson's Patent Drawing Review," PTO-948. In order to avoid abandonment of this application, correction is required in reply to the Office action. The correction will not be held in abeyance

Specification

The attempt to incorporate subject matter into this application by reference to US Patent Application xxxx entitled System and Method For Visually Analyzing Clickstream Data with a Parallel Coordinate System is improper because a specific application number was not provided.

Appropriate correction required.

Claim Objections

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not). Misnumbered claims 13 (second occurrence) through 20 have been renumbered as 14

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 20 respectfully. Applicant must refer to such newly ascribed nomenclature in all future correspondence.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 – 20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 - 21 of copending Application No. 09/653,888. Although the conflicting claims are not identical, they are not patentably distinct from each other because they all address online shopping, use of server logs and micro visualization techniques comprising a parallel coordinate system and one or more extension components.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 – 4, 8 – 11, 13 – 17 and 19 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papierniak (US 6,175,838 B1) in view of Yaginuma (US 6,477,538 B2).

Regarding Claim 1 and related claims 19 and 20, Papierniak teaches a computer system for providing one or more visualizations to one or more users, the system comprising -one or more central processing units (CPUs), one or more memories, and one or more network interfaces to one or more networks (Figure 1); a sessionization process that receives one or more Web server logs from one or more online stores, and generates one session table for each session found from requests recorded in Web server logs (Col 3, lines 1 – 23 and Figure 4). In addition and regarding claim 2, Papierniak teaches a system where the Web server log includes one or more Web page request records (Abstract, Col 3, lines 1 – 3 and Figures 1 and 3) and (3) a system, where the Web page request record comprises a timestamp that is the system-generated time when the request is made, a user ID that is a unique number identifying the

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session which made the request, a referrer that is the Web page the session sees immediately before making this request, a current page that is the Web page requested, and a group of hyperlinks that is contained in the current page (Col 7, lines 1-36) as well as (4) a system, where the session table includes one or more Web page request records with all the session ID values in a session table being the same (Abstract and Col 6, lines 16-31).

However, Papierniak does not specifically disclose and teach a shopping step finder process that receives one or more session tables, and generates one micro-conversion table for each given session table; and a visualization process that receives one or more micro-conversion tables, and generates one or more micro-conversion visualizations of one or more micro-conversions.

On the other hand, Yaginuma teaches a shopping step finder process that receives one or more session tables, and generates one micro-conversion table for each given session table (Abstract, Col 4, lines 45 – 57 and Figures 4 – 6); and a visualization process that receives one or more micro-conversion tables, and generates one or more micro-conversion visualizations of one or more micro-conversions (Col 5, lines 15 – 19 and Col 6, lines 39 – 67 and Figures 1 – 6). Moreover:

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regarding claim 8, Yaginuma teaches a system, where the micro-conversion visualization comprises a traditional parallel coordinate system and one or more extension components (Abstract, Col 2, lines 58 – 60 and Figure 6).

regarding claim 9, Yaginuma teaches a system, where the traditional parallel coordinate system is a parallel coordinate system comprising a series of parallel lines that are placed equidistantly, each parallel line being assigned a specific dependent variable and dependent variable values being plotted along the respective axis, and an independent variable that is represented by polygonal lines connecting the corresponding dependent variable values (also referred to as data points) and illustrating a relationship between an independent variable and the dependent variables appearing on each axis (Col 6, lines 40 – 67, Col 11, lines 16 – 21 and Figures 6, 12, 34 and 45).

regarding claim 10, Yaginuma teaches a system, where the extension components include one or more parallel axes of sequential events, one or more dependent variable values of timestamps, one or more dropouts of polygonal lines, one or more filters, one or more categorizers, and one or more hyperlink association (Col 6, lines 40 –67 and Figures 5, 6, 12 and 34).

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regarding claim 11, Yaginuma teaches a system, where the parallel axes of sequential events is an assignment of a series of sequential events to parallel lines in a parallel coordinate system (Figures 10 - 25).

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regarding claim 13, Yaginuma teaches a system, where the dependent variable values of timestamps is an assignment of timestamp values as data points to a series of sequential events that are assigned to the equal number of parallel axes in a parallel coordinate system (Col 12, lines 23 – 30 and Figures 14 and 21).

regarding claim 14, Yaginuma teaches a system, where the dropout of a polygonal line is disappearance of a polygonal line before the line reaches the last parallel axis in a parallel coordinate system with the parallel axes of sequential events Figures 32 and 35).

regarding claim 15, a system, as in claim 10, where the filter is a means to select and/or de-select one or more groups of polygonal lines viewed in a parallel coordinate system (Col 4, lines 50 – 54 and Figures 37 and 38).

regarding claim 16, Yaginuma teaches a system, where the categorizer is a parallel axis in a parallel coordinate system whose purpose is to categorize polygonal lines in the system (Col 6, lines 58 – 67, Col 7, lines 1 – 19 and Figures 6 and 20 – 24).

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regarding claim 18, Yaginuma teaches a system, where the hyperlink association is the association of one or more hyperlinks with the polygonal line representing a session, clicking on the polygonal line opens a Web page delivering detail information of the session (Col 7, lines 26 – 29 and Figures 8 -10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the method and system of Papierniak with the method and system of Yaginuma to enable for providing one or more visualizations to one or more users, the system comprising -one or more central processing units (CPUs), one or more memories, and one or more network interfaces to one or more networks; a sessionization process that receives one or more Web server logs from one or more online stores; and generates one session table for each session found from requests recorded in Web server logs and a shopping step finder process that receives one or more session tables, and generates one micro-conversion table for each given session table; and a visualization process that receives one or more micro-conversion tables, and generates one or more micro-conversion visualizations of one or more microconversions. In that regard, the method and system will enable the site owner to more fully understand through graphical representation the shopping process/steps for each customer. Moreover, this knowledge is most helpful in understanding the areas in a web site, which are a potential problem for a customer, correct and thereby enhance customer satisfaction.

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Claims 5 – 7, 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papierniak (US 6,175,838 B1) and Yaginuma (US 6,477,538 B2), and as applied to claims 1, 11 and 17 respectively, and further in view of Hunt (US 6,223,215 B1).

The combination of Papierniak and Yaginuma substantially disclose and teach the invention.

However, the combination of Papierniak and Yaginuma does not specifically disclose and teach where the micro-conversion table comprises shopping steps in an online store and product entries for each shopping step and include a product impression that is the view of hyperlink to a Web page presenting a product and/or a service, a clickthrough that is the click on the hyperlink and view of the Web page of the product and/or service, a basket placement that is the placement of the item in the shopping basket, and a purchase that is the purchase of the item and the completion of the transaction as well as where the product or service entry comprises a product or service ID that is a unique number identifying the product or service, and a timestamp when the corresponding shopping activity happens. Nor does the combination specifically disclose and teach, where the sequential events include one or more steps of shopping in one or more stores, and one or more product or service development steps as ell as where the categorizer includes one or more of the following: the referrer Web sites of sessions, the ISPs (Internet Service Providers) of sessions, the lengths of sessions, the

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methods used to find product or service information by sessions, the geographic regions where sessions come from, the ages, sex, education levels, and income levels of the owners of sessions, the sales history of the owners of sessions, the Web page patterns accessed by sessions or by the owners of sessions, either or not ordered by session, or by time.

On the other hand and regarding claim 5, Hunt teaches a system, where the micro-conversion table comprises shopping steps in an online store and product entries for each shopping step (Col 2, lines 18 - 40).

Regarding claim 6, Hunt teaches s system, where the shopping steps include a product impression that is the view of hyperlink to a Web page presenting a product and/or a service, a clickthrough that is the click on the hyperlink and view of the Web page of the product and/or service, a basket placement that is the placement of the item in the shopping basket, and a purchase that is the purchase of the item and the completion of the transaction (Col 2, lines 7-31)

Regarding claim 7, Hunt teaches a system, where the product or service entry comprises a product or service ID that is a unique number identifying the product or service, and a timestamp when the corresponding shopping activity happens (Col 5, lines 46 – 64 and Figure 3).

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Regarding claim 12, Hunt teaches a system, where the sequential events include one or more steps of shopping in one or more stores, and one or more product or service development steps (Col 2, lines 18 – 20).

Regarding claim 18, Hunt teaches a system, where the categorizer includes one or more of the following: the referrer Web sites of sessions, the ISPs (Internet Service Providers) of sessions, the lengths of sessions, the methods used to find product or service information by sessions, the geographic regions where sessions come from, the ages, sex, education levels, and income levels of the owners of sessions, the sales history of the owners of sessions, the Web page patterns accessed by 20 sessions or by the owners of sessions, either or not ordered by session, or by time (Col 2, lines 7 - 8).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the combination of Papierniak and Yaginuma with the system of Hunt to enable the micro-conversion table comprises shopping steps in an online store and product entries for each shopping step and include a product impression that is the view of hyperlink to a Web page presenting a product and/or a service, a clickthrough that is the click on the hyperlink and view of the Web page of the product and/or service, a basket placement that is the placement of the item in the shopping basket, and a purchase that is the purchase of the item and the completion of the transaction as well as where the product or service entry comprises a product or service ID that is a unique

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number identifying the product or service, and a timestamp when the corresponding shopping activity happens as well referral sites - in order to more fully understand both the origin of the shopper/visitor and to ensure that the on-line and off-line business processes fully support each shopper/visitors requirements. In this regard, the ease of purchasing is significantly increased providing the purchaser with a personal and pleasant experience thereby increasing their level of satisfaction with the site as well improving the probability that they will return again. Moreover, it would have provided a better understanding and targeting of advertisement campaigns.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rob Rhode whose telephone number is 703.305.8230. The examiner can normally be reached on M-F 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wynn Coggins can be reached on 703.308.1344. The fax phone numbers for the organization where this application or proceeding is assigned are 703.305.7658 for regular communications and 703.308.3687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.306.1113.

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RER

March 28, 2003

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600